The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ALEXANDER THOEMMES and BRETT K. BLOOMQUIST

Appeal No. 2006-0908
Application No. 09/256,896

ON BRIEF

Before BARRETT, RUGGIERO, and BLANKENSHIP, Administrative Patent Judges.

BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-38, which are all the claims in the application.

We affirm-in-part.

BACKGROUND

The invention relates to computer aided design and drawing programs. A user may desire to align objects in accordance with one or a number of different interesting points known as alignment or reference points on the object; e.g., align an endpoint of a first line with a midpoint of a second line so that the endpoint and the midpoint have the same x-coordinate. In prior art systems, drawing programs typically acquire and display interesting points on the object as the user moves the cursor over the object or within some specified distance from the interesting point. These interesting points may be highlighted by flashing the points and creating extension lines as the cursor is moved about the display. The highlighting may not be useful in the case of a large number of extension lines and interesting points flashing on the display. In appellants' system, a data point is acquired not immediately when a cursor is positioned over or near the data point of interest, but after a period of time called the "acquisition pause time." (Spec. at 2; Abstract.) Claims 1 and 36 are reproduced below.

> 1. A method of acquiring a data point of interest on a drawing object, comprising the steps of:
>
> accepting a command to move a cursor near the data point of interest on the drawing object in a computer-implemented drawing program; and
>
> acquiring the data point after the cursor remains near the data point for an acquisition pause time.
>
> 36. A method of acquiring a data point of interest on a drawing object, comprising the steps of:
>
> accepting a modifier command; and

acquiring the data point of interest on a drawing object in a computer-implemented drawing program after a command is received to move a cursor near the data point, wherein the data point is not acquired without the modifier command.

The examiner relies on the following references:

Newell et al. (Newell)	5,123,087	Jun. 16, 1992
Venolia	5,463,722	Oct. 31, 1995
Kimble	6,031,531	Feb. 29, 2000 (filed Apr. 6, 1998)

Claims 36 and 38 stand rejected under 35 U.S.C. § 102 as being anticipated by Venolia.

Claims 1, 2, 6-11, 13, 14, 18-22, 24, 25, 29-33, 35 and 37 stand rejected under 35 U.S.C. § 103 as being unpatentable over Venolia and Kimble.

Claims 3-5, 12, 15-17, 23, 26-28, and 34 stand rejected under 35 U.S.C. § 103 as being unpatentable over Venolia, Kimble, and Newell.

The examiner mailed a final rejection on January 21, 2003. Appellants filed an appeal brief on June 17, 2003. After an examiner's answer and a reply brief from appellants, the examiner mailed a paper styled "Response to Reply Brief" on March 23, 2004. Appellants filed another reply brief on May 21, 2004, which pointed out that the rules did not allow an examiner's answer in response to a reply brief. The Board remanded the proceeding (Jul. 13, 2004), noting that a supplemental examiner's answer was not permitted absent a remand by the Board for such purpose. The examiner vacated the earlier supplemental answer, and mailed a paper styled

"Supplemental Examiner's Answer" on December 2, 2004. Appellants filed, in response, a "supplemental" reply brief on January 26, 2005. Appellants complain therein that the latest "Supplemental Examiner's Answer" does not follow any of the options specified by the Board's remand, and further does not comply with current Office policy, as there is no indication that the paper was approved by the Technology Center Director or designee.

We agree with appellants that the examiner's paper mailed December 2, 2004 is defective with regard to procedure. However, appellants' paper filed January 26, 2005 addresses the rejections and positions set out in the examiner's paper of December 2, 2004. Appellants have taken the opportunity for a full response to the examiner's paper of December 2, 2004, and do not allege that the rejections therein constitute new grounds of rejection. The statutory basis of the rejections, and the references relied upon, are unchanged from the final rejection entered January 21, 2003.

To avoid the further delay in the prosecution of the instant application that would be caused by a second remand, we will review the adverse decision of the examiner in light of appellants' arguments set out in the latest reply brief, and make the determinations that follow.

OPINION

Section 102 rejection over Venolia

Venolia relates to an automatic alignment method and apparatus in a computer graphics system based on a model of magnetic attraction between two objects; e.g., a magnet and the metal door of a refrigerator. Col. 8, ll. 14-22. A manipulated object, chosen by pressing and holding down a mouse button, becomes "metallic" and all the other objects in the scene become "magnetic." The manipulated object may be automatically aligned with a nearby object under the influence of an alignment field gradient. Col. 9, ll. 29-36.

Venolia describes a "tail dragging" mode of manipulation whereby depressing the mouse button and holding it down while the cursor is near the edge of a displayed object causes the object to trail along behind the cursor. An object may thus rotate freely about the location point of the cursor as the cursor is moved about. Dragging a manipulated object close to another object within a display scene, such that the manipulated object is within the influence of the other object's magnetic alignment field gradient, causes the manipulated object to become automatically attracted to and drawn into alignment with the other object under the influence of the alignment field gradient exerted by the other object. Col. 10, l. 21 - col. 11, l. 6. The manipulated object may pull away from the cursor dictated position when under the influence of another object. Col. 11, ll. 21-34.

When the user drags a vertex of a displayed object towards the vertex of another object displayed in a scene, the vertex follows the cursor exactly if the manipulated object is outside of the influence of another object. Col. 12, ll. 6-29. Venolia provides numerous examples regarding how objects may become aligned under the influence of another object. In a simple example (Fig. 8), since faces have a stronger alignment field gradient attraction than edges or vertices, the system determines that the desired alignment between two squares, out of 64 possible solutions, is the alignment of points P_{E4} with Q_{E2}. Col. 15, l. 35 - col. 16, l. 28. When the closest points between the manipulated object and the alignment object in a scene are determined, the proper alignment of the objects will be determined. Col. 19, l. 30 - col. 20, l. 9. Frequently used special points, such as face and edge midpoints (Fig. 10(b)) may be automatically included in alignment geometry, and others might be added in the modeling process. Col. 21, ll. 13- 17.

Venolia thus discloses a method that comprises accepting a modifier command; i.e., pressing and holding down a mouse button, such that a manipulated object becomes "metallic" and all the other objects in the scene become "magnetic." Venolia further discloses acquiring the data point of interest on a drawing object, which can be the initial determination of the closest point on the "magnetic" object as the manipulated object is moved within the gradient field of the "magnetic" object. The acquiring of the data point of interest can also be the determination of the relevant point on the "magnetic" object in the matching of points for object alignment (e.g., Fig. 8). The data

point is acquired after a command is received to move a cursor near the data point; i.e., the manipulated object is dragged by the cursor toward, and sufficiently near, the "magnetic" object such that the manipulated object comes under the influence of the "magnetic" object.

We have considered appellants' arguments to the contrary, but in our view Venolia supports the examiner's finding of anticipation with respect to the broad terms of instant claim 36. The law of anticipation does not require that a reference "teach" what an applicant's disclosure teaches. Assuming that a reference is properly "prior art," it is only necessary that the claims "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983). Further, it is not necessary for Venolia to describe the invention in the same terms as those of the instant claim. For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. However, this is not an "ipsissimis verbis" test. In re Bond, 910 F.2d 831, 832, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990).

We will also sustain the § 102 rejection of dependent claim 38, wherein the modifier command comprises the depression of a keyboard key. In Venolia, keyboard commands may be used for creating multiple object alignments. In addition, a "shift-click" operation may be used for selecting more than one object at a time. Col. 22, ll. 4-19.

Section 103 rejections

The remainder of the independent claims (1, 13, 24, and 35) are rejected under 35 U.S.C. § 103 as being unpatentable over Venolia and Kimble. As for acquiring the data point after the cursor remains near the data point for an acquisition pause time -- required by independent claims 1, 13, and 24, and by claim 37 depending from claim 36 -- the examiner finds that such is "inherent" in Venolia. The rejection further relies on Kimble for its alleged teaching of acquiring a cursor after the cursor remains near an object after a period of time, referring to Figure 7, element 164 and column 9, lines 34 through 37. (Examiner's paper of Dec. 2, 2004 at 5.)

We agree with the examiner to the extent that some measurable delay, due to the required hardware and software processing, would be inherent in the acquisition of a data point. However, there would be a delay in acquisition, rather than a "pause time" before acquisition. We agree with appellants to the extent that the claimed "acquisition pause time" represents a period of time beyond that of any inherent delays in the system.

Kimble is directed to graphical user interface elements such as graphically displayed icons. In particular, the reference relates to technology to assist physically challenged users in manipulating graphically displayed icons and other objects displayed within graphical user interface devices. Col. 1, ll. 9-19.

Kimble discloses (Fig. 6(a)) an icon 70 and an associated icon domain 65. Icon 70 is essentially "magnetized," such that when cursor object 63 is moved into domain

65, the cursor object is immediately "snapped" to the center of icon 70. Col. 7, ll. 18-42. Figure 7 shows a way in which the function associated with the icon or object upon which the cursor is dwelling may be automatically activated without further action by the user. The reference teaches a "dwell" feature whereby a dwell time threshold may be adjusted by user configuration. If the dwell feature is enabled, and the cursor dwells on the icon or object past the configured time interval, the associated function is activated. Col. 9, ll. 18-46; Fig. 7, elements 164, 168, 170.

Kimble thus does not demonstrate an inherent processing time for acquiring a data point, but teaches what could be considered a "pause time" that may be set by a user. However, the icon or object is not -- nor is a data point -- acquired after the set time. Rather, the underlying function represented by the icon or object is activated. We agree with appellants that any combination of Venolia and Kimble to meet the requirements of instant (representative) claim 1 could only result from an improper hindsight reconstruction of the invention.

Claim 35 differs from claims 1, 13, and 24 in the method of "unacquiring" an acquired data point after the cursor remains near the acquired data point for an "unacquisition" pause time. The rejection relies on Kimble's teaching that icons or objects may be "demagnetized." Col. 10, ll. 9-30. Kimble teaches that an icon or object may be "demagnetized" for a specified time interval after the cursor is moved from the icon or object after having been "snapped" to the icon or object in accordance with the system discussed supra. However, demagnetizing an icon or object for a specified time

interval after a cursor is moved away fails to teach or suggest unacquiring an acquired data point after the cursor remains near the point for an unacquisition pause time. In our estimation, combining the teachings of the references to meet the terms of claim 35 could only result from improper hindsight.

Newell, applied in further combination against dependent claims, does not remedy the basic deficiency in the rejection based on Venolia and Kimble. We thus do not sustain the § 103 rejection of any of claims 1 through 35 and 37.

CONCLUSION

The rejection of claims 36 and 38 under 35 U.S.C. § 102 is affirmed. The rejection of claims 1 through 35 and 37 under 35 U.S.C. § 103 is reversed. The examiner's decision is thus affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a). See 37 CFR § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

LEE E. BARRETT
Administrative Patent Judge

JOSEPH F. RUGGIERO
Administrative Patent Judge

HOWARD B. BLANKENSHIP
Administrative Patent Judge

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